



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,295	02/05/2002	Oscar R. Mitchell	LYRN004US0	9657

58293 7590 11/29/2006

FORTKORT & HOUSTON P.C.  
9442 N. CAPITAL OF TEXAS HIGHWAY  
ARBORETUM PLAZA ONE, SUITE 500  
AUSTIN, TX 78759

EXAMINER
----------

TRUONG, LECHI

ART UNIT	PAPER NUMBER
----------	--------------

2194

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/068,295	<b>Applicant(s)</b> MITCHELL ET AL.	
	<b>Examiner</b> LeChi Truong	<b>Art Unit</b> 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-22 are presented for the examination.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view of Bector et al (US. Patent 6,687,732 B1).

3. As to claim 1, Rosenberg teaches the invention substantially as claimed including: a message (the packet, col 3, ln 7-9/ ln 23-25), a selected application (determine the direction of routing of packet to another satellite or to its destination, col 3, ln 13-17/terminal within a said cell, col 2, ln 65-67 to col 3, ln 1-3/ another satellite, col 3, ln 14-17/ln 27-31/ ln 44-47/ destination sector, col 3, ln 59-62), a selected application format (each packet is provided with a header incorporating a destination address and is used by node to determine routing of the that packet, col 4, ln 48-51/ col 3, ln 53-62/ corresponding format to the incoming packets, col 10, ln 7-10), ascertaining whether the message is in a selected application format (col 3, ln 1-3/ ln 27-31/ ln 58-61), a next location (another system node, col 3, ln 59-62), if the message is not in the selected application format: routing the message to a next location( col 3, ln 13-17/ ln 45-48/ ln 58-62), if the message is in the selected application routing the message to a selected application

Art Unit: 2194

processor( col 3, ln 1-3/ ln 10-16/ ln 29-32/col 10, ln 7-10), processing the message by the selected application processor( col 4, ln 48-52/col 5, ln 54-58/col 9, ln 59-63/ col 10, ln 27-31), routing the message to the next location( col 10, ln 35-36/ ln 45-60), receiving (arrives col 10, ln 46-47).

4. Rosenberg does not explicitly teach processing the message by the selected application and routing the message to the next location when the next location is the same location for transfer the message without processing of the selected application). However, Bector teaches processing the message by the selected application and routing the message to the next location when the next location is the same location for transfer the message without processing of the selected application (packet information “network traffic” pass on their way through communication path 108 to one or more origin servers...the routing device may intercept certain classes of IP and TCP/IP traffic, intended for one or many origin engine 116. The proxy processing engine 116 may then deliver responses to client request, or otherwise participate in the representation or transport of the client to origin server transaction, col 1, ln 45-50 and ln 55-63/ involves the obscuration of IP identity through proxies. As result of traffic interception and the presence of the proxy server 114, when the client’s forwarded request reaches the origin server 124, col 3, ln 39-45/ a determine is made as to whether matching address value is found in any of searches. If match found... packet is not sent to proxy engine 116, and sent transparently on its way to original server 124, col 9, ln 15-22/ if no match is found ... may involve proxy processing engine 116 sending an HTTP request message to original server 124, col 9, ln 25-30 and 65-67).

Art Unit: 2194

5. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg and Bector because Bector's processing the message by the selected application and routing the message to the next location would improve the efficiency of Rosenberg's system by allowing the traffic packet to direct transfer to the server bypass the proxies server to reduce traffic load on the server.

6. As to **claim 2**, Rosenberg teaches the message includes receiving a packet (col 4; ln 48-52).

7. As to **claim 3**, Rosenberg teaches the packet from a network (col 2, ln 37-40).

8. As to **claim 4**, Rosenberg teaches the packet from a switched network (col 1, ln 19-22/col 10, ln 32).

9. As to **claim 5**, Rosenberg teaches the internet (col 1, ln 29-31).

10. As to **claim 6**, Rosenberg teaches the message is encrypted (col 5, ln 54-57); processing the message by the selected application processor includes decrypting the message by the selected application processor (col 5, ln 54-58).

11. As to **claims 19, 20, 21**, they are apparatus claims of claims 1, 2 and 6; therefore, they are rejected for the same reasons as claims 1, 2 and 6 above.

12. Claims **7-12, 14, 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view of Bector et al (US. Patent 6,687,732 B1), as applied to claim 1 above, and further in view of Shanklin et al (US. Patent 6,578,147 b1).

13. **As to claim 7**, Rosenberg teaches a network (networks, col 2, ln 37-38), a fabric configured for communication (col 6, ln 52-56), a plurality of application service devices (satellite nodes 11, col 4, ln 48-52), unprocessed application specific message (packet, col 5, ln 52-58), the plurality of application service devices are configured to receive a plurality of unprocessed application specific message (col 4, ln 45-48), a particular application (the terminals at the edges of the satellite, col 5, ln 55-58), the application specific message (the packet contain a header which includes a destination address and a sequence filed. The payload in the packet contains the encoded user data, which can be from any kind of multimedia service and can include, for example, voice, video, or data, col 5, ln 52-58), each unprocessed application specific message is configured to be processed by a particular application (col 5, ln 53-58/ col 10, ln 7-10/ ln 27-31), each unprocessed applications specific message is processed with the particular application for with it is configured (col 4, ln 48-52/col 5, ln 54-58/ col 6, ln 2-10/col 9, ln 59-63/ col 10, ln 27-31), a plurality of processed application-specific messages is produced( col 5, ln 56-57), service devices are configured to sent the each processed application specific message to the fabric( col 9, ln 59-63/col 10, ln 56-62).

14. Rosenberg and Bector do not explicitly teach process message in parallel. However, Shanklin teaches process message in parallel (the sensors operation in parallel and analyze packet to determine, col 2, ln 64-66).

15. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg, Bector and Shanklin because Shanklin's process message in parallel would determines if there is an attempt to gain unauthorized access to the network.

Art Unit: 2194

16. **As to claim 8**, it is an apparatus claim of claim 2; therefore, it is rejected for the same reason as claim 2 above.

17. **As to claim 9**, Rosenberg teaches a hardware state machine (col 10, ln 9-11).

18. **As to claim 10**, Shanklin teaches the plurality of application service devices is included in a single integrated circuit (col 6, ln 65-67).

19. **As to claim 11**, Shanklin teaches each application service device comprises a simple programmable processor (col 10, ln 7-8).

20. **As to claim 12**, Shanklin teaches a plurality of interoperable configured distinct physical devices (col 9, ln 5-6).

21. **As to claim 14**, Shanklin teaches an unprocessed application stream (col 5, ln 56-61).

22. **As to claim 16**, Shanklin teaches an e-mail transfer (col 5, ln 3-5).

23. **As to claim 17**, Shanklin teaches a virtual private networking communication (col 1, ln 15-17).

24. **As to claim 18**, Shanklin teaches a TPC offload engine communication (col 5, ln 63-64).

25. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view of Bector et al (US. Patent 6,687,732 B1), as applied to claim 1 above, in view of Shanklin et al (US. Patent 6,578,147 b1) and further in view of TB (Troubleshooting).

26. **As to claim 13**, Rosenberg, Bector and Shanklin do not teach SSL/TLS. However, TB teaches SSL/TLS (SSL/TLS, page 2, ln 12).

Art Unit: 2194

27. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg, Bector, Shanklin and TB because TB's SSL/TLS would improves performance of Rosenberg, Bector and Shanklin's systems by allowing the requirement for implementing an encryption acceleration hardware.

28. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view Bector et al (US. Patent 6,687732 B1), in view of Shanklin et al (US. Patent 6,578,147 b1) and further in view of TB (Troubleshooting).

29. As to claim 15, Rosenberg, Bector and Shanklin do not teach an SSL/TLS connection between a web browser and a web server. However, TB teaches an SSL/TLS connection between a web browser and a web server (page 4, ln 22-25).

30. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg, Bector, Shanklin and TB because TB's an SSL/TLS connection between a web browser and a web server would improves the efficiency of Rosenberg, Bector and Shanklin's systems by providing the performance required for implement encryption acceleration hardware.

31. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view of Bector et al (US. Patent 6,687732 B1), as applied to claim 1 above, and further in view of Muthukumar et al (US. Patent 6,820,250 b2).



Art Unit: 2194

32. As to claim 22, Rosenberg teaches the invention substantially as claimed including: a message (the packet, col 3, ln 7-9/ ln 23-25), a selected application (terminal within a said cell, col 2, ln 65-67 to col 3, ln 1-3/ another satellite, col 3, ln 14-17/ln 27-31/ ln 44-47/ destination sector, col 3, ln 59-62), format (format, col 10, ln 7-10), ascertaining whether the message is in a selected application format (col 3, ln 1-3/ ln 27-31/ ln 58-61), a next location (another system node, col 3, ln 59-62), if the message is not in the selected application format: routing the message to a next location( col 3, ln 13-17/ ln 45-48/ ln 58-62), if the message is in the selected application routing the message to a selected application processor( col 3, ln 1-3/ ln 10-16/ ln 29-32/col 10, ln 7-10), processing the message by the selected application processor( col 4, ln 48-52/col 5, ln 54-58/col 9, ln 59-63/ col 10, ln 27-31), routing the message to the next location( col 10, ln 35-36/ ln 45-60), the routing of the message to the next location (col 10, ln 58-61).

33. Rosenberg and Bector do not teach the first/second iteration, a pineline. However, Muthukumar teaches iteration, a pipeline (the first iteration, last iteration, the software pipeline, col 2, ln 64-67).

34. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg, Bector and Muthukumar because Muthukumar's the first / second iteration, a pineline would improve the efficiency of Rosenberg, Bector 's systems by allowing the system to improve the performance of software pinelined loops.

**Response to the argument:**

35. Applicant amendment filed on 11/09/2005 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) “ it does not teach or suggest the element of “ if the element is not in the selected application format: routing the message to a next location and if the message is in the selected format: routing the message to a selected application processor”

(2) “ in particular Rosenberg et al does not teach the step of “ routing the message to the next location” subsequent to the step of processing the message by the selected application processor”

(3) “ the message is neither routed to a selected application processor” nor processing by the selected application processor”

(4) “ it is not sent anywhere by the satellite nodes”.

36. Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Rosenberg teaches the comparison performed in the satellite of the address of destination cell of the packet [application format] with the stored address is done in a hierarchical way and the number and bit position of the difference between said codes is used to determine the direction of routing of the packet to another satellite or to its destination (col 3, ln 10-17). The determine step is used for selection of the packet and the destinations. The packet with matched address will be routed to its destination. If the packet with unmatched address will be routed to the satellite (col 3, ln 10-16/ ln 55-62). Its destination is corresponding to the destination address in the packet (Each packet is provided with a header incorporation a destination address which is read ... used by the node to determine routing of the packet. This destination address comprises the address of the cell to which the packet should be sent and the address necessary to reach the destination from the cell, col 4, ln 48-53 / col 10, ln 50-62)

As to the point (2), Bector teaches the packet is determined to directly sent to the original server [next location] or to sent to the proxy server [application processor] for processing before sent to the original server [the next location](packet information “network traffic” pass on their way through communication path 108 to one or more origin servers...the routing device may intercept certain classes of IP and TCP/IP traffic, intended for one or many origin engine 116. The proxy processing engine 116 may then deliver responses to client request, or otherwise participate in the representation or transport of the client to origin server transaction, col 1, ln 45-50 and ln 55-63/ involves the obscuration of IP identity through proxies. As result of traffic interception and the presence of the proxy server 114, when the client’s forwarded request reaches the origin server 124, col 3, ln 39-45/ a determine is made as to whether matching address value is found in any of searches. If match found... packet is not sent to proxy engine 116, and sent transparently on its way to original server 124, col 9, ln 15-22/ if no match is found ... may involve proxy processing engine 116 sending an HTTP request message to original server 124, col 9, ln 25-30 and 65-67/ pass the packet logically upward for processing the proxy processing engine 116[processing packet], col 2, ln 40-41).

As to the point (3), Rosenberg teaches determine the direction of routing of the packet to another satellite or to its destination (col 3, ln 6-7), another satellite or its destination are selected from the step of determining. Rosenberg also teaches processing the packet (Furthermore, the processing of the packets is carried out at each satellite in a hop-by-hop basis, col 6, ln 2-10/ transmission of packet to the satellite, reception of packets from the satellite, and analysis and generation of statistics of received packets, col 9, ln 59-63).

Art Unit: 2194

As to the point (4), Rosenberg also teaches for claim 7(The functions carried out by the cell are: generation of packets, sharing and addressing of packets, transmission of packet to the satellite, reception of packets from the satellite, and analysis and generation of statistics of received packets, col 9, ln 59-63 / the processing of the packets is carried out at each satellite in a hop-by-hop basis, col 6, ln 2-10). In additional, Bector teaches Internet packet addressing, and through which packets of information pass on their way through communication path 108 to one of more original servers 124 within the Internet work. The term "origin servers" is used herein to identify a server as originating point of delivery for one or more electronic documents that may be of interest to client 100, col 1, ln 45-52/ a requesting a web page from origin server 124. Assume original server 124 only gives documents to select clients based on their IP address [processing packet], col 10).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2194

***Conclusion***

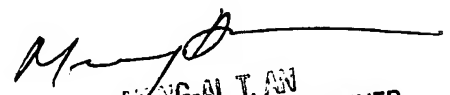
Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

May 12, 2006

  
MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
MAY 12 2006 2194